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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,260	10/21/2003	Claus Dreisbach	CH-7882/LeA 36,184	3415
34947	7590	10/31/2005	EXAMINER	
LANXESS CORPORATION			SACKEY, EBENEZER O	
111 RIDC PARK WEST DRIVE			ART UNIT	
PITTSBURGH, PA 15275-1112			PAPER NUMBER	

1626

DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/690,260

Applicant(s)

DREISBACH ET AL.

Examiner

EBENEZER SACKKEY

Art Unit

1626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-15 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 07/16/04, 11/02/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 1626

DETAILED ACTION

Status of Claims

Claims 1-15 are pending.

Specification

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3 and 7-15 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for organic acids listed of pages 3-4 and especially page 6 of the specification, does not reasonably provide enablement for

Art Unit: 1626

using any and all organic acid. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. Claim 1 recites a process for producing an enantiomerically enriched 3-aminopentanenitrile comprising the step of reacting a racemic 3-aminopentanenitrile with an enantiomerically enriched organic acid.

Organic acids are known in the art and myriad forms of organic acids can be found as evidenced by U.S. Patent numbers 5,210,258, 5,552,504 and 3,978,147. Note in these patents the production of specific types of organic acids, not any and all organic acid as alleged herein.

Applicants own admission, page 2 of the specification states "the preparation of enantiomerically pure or enantiomerically enriched (R)- or (S) 3-aminopentanenitrile by resolution of racemic 3-aminopentanenitrile has hitherto not been described anywhere in the prior art" and "----- is very laborious-----" suggesting the unpredictability of the process.

Also, given the separation step needed to make the enriched compounds, not all organic groups would be considered viable groups to be employed in the separation step.

The specification provides no other guidance as to what other organic acids groups are suitable for use in the instant process. Applicant's limited working examples do not enable one of ordinary skill in the art to prepare any and all 3-aminopentanenitrile employing any and all organic acids encompassed by the instant invention.

Hence, the specification fails to provide sufficient support of the broad use of organic acids. As a result necessitating one of ordinary skill in the art to perform an exhaustive search for which other organic acid in addition to the ones listed on page 3-4 that can be used in order to practice the claimed invention.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 and 11-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The following reasons apply:

1.) Claim 1 should read as "A process for---" and subsequent claims should read as "The process according to ----". Additionally, the scope of the claim is completely unascertainable in the absence of any reaction conditions.

2.) In claim 3, it appears more than menthol derivative *per se* is being embraced herein. Menthol by well-accepted definition is $\text{CH}_3\text{C}_6\text{H}_9(\text{C}_3\text{H}_7)\text{OH}$. Note *In re Hill*, 161 USPQ 229 (CCPA 1969).

3.) The same remark made directly above applies "N-protected amino acid" which appears to include all amino acids. Note *In re Hill*, *supra*.

4.) In claim 7, it is not clear what the decomposition temperatures of the reactants are.

Art Unit: 1626

5.) For claim 9, is 0.1-1 equivalent of any organic acid applicable?

6.) Also, the nature of the protected amino group in claims 3 and 6 is not clear since applicants do not indicate which amino acid needs to be protected.

7.) In claims 10, which base is stronger than the amine function in 3-aminopentane nitrile?

8.) In claim 11, which acid is stronger than the enantiomerically enriched organic acid employed in claim 1?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 7-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Williams et al., J. Nat. Prod. 2002, 65, 29-31.

Applicants claim a process for preparing an enantiomerically enriched 3-aminopentane nitrile from a racemic 3-aminopentane nitrile comprising reacting a racemic 3-aminopentane nitrile with an enantiomerically enriched organic acid.

Williams et al., discloses the resolution of 3-aminopentane nitrile. See page 31, compound 5 and derivatives thereof.

Art Unit: 1626

Allowable Subject Matter

Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to E. Sackey whose telephone number is (571) 272-0704.

The examiner can normally be reached on Monday-Friday from 7:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane, can be reached on (571) 272-0699. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.

EOS
October 20, 2005

KAMAL A. SAEED, PH.D.
PRIMARY EXAMINER

for Kamal Saeed
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